# Sampling and Analysis Plan (SAP)

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***RIM Training Session – 7 Oct 2004***

# SAP - Introduction

- SAP – Goals and approach
- Sampling Plan Structure – with new RIM requirements
- Application information

# Sampling Plan – Goals and Approach

- Collects information to evaluate disposal plan
- Required by Sections 404 (CWA) and 103 (MPRSA)
- Part of Multi-Tiered Approach – previous data may be sufficient

# Sampling Plan – Goals and Approach

- **Chemical and Biological Sampling**
- **Physical Sampling - Beach nourishment**

# Sampling Plan Structure – Bulk Chemistry

- Project Description
- **RIM Notification**
- Spills & Outfalls
- Core sample description/storage
- **Lat/long requirements**

# Sampling Plan Structure – Lat/long requirements

- GPS all core sample locations
- Hand-held GPS unit can be used
- Datum NAD 83, decimal minutes
- Required horizontal accuracy - 3 meters or less (as outlined in 7/26 letter)
- Accuracy can be as advertised

# Sampling Plan Structure – cont.

- **Compositing requirement**
- **Bulk Sediment Chemistry Parameters/Reporting Limits**
- **New Quality Control Requirements.** **Quality Control Summary Tables**

# Sampling Plan Structure – cont.

- **EDD Requirements**
- **Non-Detect/Reporting Limits Policy**
- **Contact Info**

# Bulk Sediment Testing Parameters - 1

| Parameter | Analytical Method | Reporting Limit |
|---|---|---|
| Metals | 6010B, 6020, 7060, 7061, 7131, 7190, 7191,7210, 7420, 7421, 7471, 7520, 7950 | varies |
| PCB's | 8082A (total by summation) | 1 ppb |

# Bulk Sediment Testing Parameters - 2

| Parameter | Analytical Method | Reporting Limit |
|---|---|---|
| Pesticides | NOAA (1993), 8081B | 0.001 ppm |
| PAH's | 8270C-SIM | 0.01 ppm |
| TOC | Plumb (1981), APHA (1195) | 0.1% |

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# Bulk Sediment Testing Parameters - 3

| Parameter | Analytical Method | Reporting Limit |
|---|---|---|
| Percent Moisture | Plumb (1981), EPA (1992), PSEP (1986) | 1.0% |
| Grain Size | Wet Sieve (#4, 10, 40, 200) | |

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# Sampling Plan Structure – Biological Sampling

- Similar to Chemical SAP
- Additional biological tests
- Timing of tests
- Joint authorship with EPA

# Sampling Plan Structure – Biological Sampling

- 10-Day Bioassay Test
- Bulk Sediment Chemistry Parameters/Detection Limits
- 28-day bioaccumulation test – COC's
- Suspended Particulate Bioassay Test

# Application Information - to make your process easier

- Plan view - Footprint
- Spill History
- Permit History
- Disposal Option and Plans

**All required information – put in front of application**

# Application Information - to make your process easier

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